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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,534	03/30/2004	Russell J. Palum	87129PCW	3301

7590 04/25/2006
Pamela R. Crocker
Patent Legal Staff
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Rochester, NY 14650-2201

EXAMINER

LUU, THANH X

ART UNIT	PAPER NUMBER
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2878

DATE MAILED: 04/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/812,534

Applicant(s)

PALUM ET AL.

Examiner

Thanh X. Luu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-8 and 16-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-8 and 16-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This Office Action is in response to amendments and remarks filed March 31, 2006. Claims 1-4, 6-8 and 16-22 are currently pending.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-4, 6-8 and 16-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1 and 16, it is unclear in its given context what is "image forming light" and "reflective light". Furthermore, it is unclear how image forming light and reflective light is related to incident light and the wavelengths. It appears that imaging light does also reflect and reflective light also forms an image.

The other claims are indefinite based on their dependencies.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3, 6, 8, 16, 18, 20 and 22, as understood, are rejected under 35

U.S.C. 102(e) as being anticipated by Takanashi et al. (UK Patent Application GB 2131599).

Regarding claims 1, 3, 6, 8, 16, 18, 20 and 22, Takanashi et al. disclose (see Fig. 7) a camera and an image sensor, comprising: a plurality of pixels (of solid state imager 7) for absorbing incident light; and an absorptive material (within A) spanning the pixels that absorbs wavelengths (see Fig. 2) at a transition between a desired bandpass and a rejection band, and wherein the light passes through the absorptive material three times (see Fig. 14). Takanashi et al. also disclose (see Fig. 2) the transition is substantially between 600 to 700 nanometers; and (see Fig. 7) the absorptive material is layered on a cover-glass (1) or disposed on a color filter (4).

5. Claims 1, 3, 4, 16, 18 and 19, as understood, are rejected under 35

U.S.C. 102(e) as being anticipated by Obama et al. (U.S. Patent Application Publication 2003/0197947).

Regarding claims 1, 3, 4, 16, 18 and 19, Obama et al. disclose (see Fig. 9) a camera and an image sensor, comprising: a plurality of pixels (of solid state imaging device I) for absorbing incident light; and an absorptive material (within IRCF) spanning the pixels that absorbs wavelengths (see Fig. 11) at a transition between a desired bandpass and a rejection band, and wherein the light passes through the absorptive material three times (see Fig. 9). Obama et al. also disclose (see Fig. 1) the transition is substantially between 600 to 700 nanometers. Obama et al. also disclose (see Figs.

10, 11, 15, 16, 22, 23, 32, 33) a plurality of transitions at which there is a corresponding plurality of desired bandpass and rejection bands.

6. Claims 1, 3, 16 and 18, as understood, are rejected under 35 U.S.C. 102(e) as being anticipated by Yonetani et al. (U.S. Patent Application Publication 2004/0165694).

Regarding claims 1, 3, 16 and 18, Yonetani et al. disclose (see Figs. 13 and 14) a camera and an image sensor, comprising: a plurality of pixels (of CCD 104) for absorbing incident light; and an absorptive material (within F1) spanning the pixels that absorbs wavelengths (see Fig. 15) at a transition between a desired bandpass and a rejection band, and wherein the light passes through the absorptive material three times (see Fig. 14). Yonetani et al. also disclose (see Fig. 15) the transition is substantially between 600 to 700 nanometers.

7. Claims 1, 3, 7, 16, 18 and 21, as understood, are rejected under 35 U.S.C. 102(e) as being anticipated by Tsuyuki (U.S. Patent 6,985,170).

Regarding claims 1, 7, 16 and 21, Tsuyuki discloses (see Fig. 13) a camera and an image sensor, comprising: a plurality of pixels (of CCD) for absorbing incident light; and an absorptive material (F23) spanning the pixels that absorbs wavelengths (IR) at a transition between a desired bandpass and a rejection band, and wherein the light passes through the absorptive material three times (see Fig. 13). Tsuyuki also discloses (see Fig. 13) the absorptive material is disposed between the image sensor (CCD) and a cover-glass (C4, or C5) and (see Fig. 14) the transition is substantially between 600 to 700 nanometers.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 2 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over either one of Takanashi et al. or Yonetani et al. or Obama et al. or Tsuyuki in view of Saito et al. (U.S. Patent 5,685,919).

Regarding claims 2 and 17, Takanashi et al., Yonetani et al., Obama et al. and Tsuyuki disclose the claimed invention as set forth above. Takanashi et al., Yonetani et al., Obama et al. and Tsuyuki do not specifically disclose the colorant is a cyan copper phthalocyanine. Saito et al. teach (see col. 4, line 30) copper phthalocyanine as the absorptive material for a sensor. Furthermore, choosing the type of material or color is design choice and requires only routine skill in the art. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made use copper phthalocyanine cyan colorant in the apparatus of Takanashi et al. or Yonetani et al. or Obama et al. or Tsuyuki in view of Saito et al. for a desired and effective wavelength absorption response.

Response to Arguments

10. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh X. Luu whose telephone number is 571-272-2441. The examiner can normally be reached on M-F 6:00AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 571-272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, consisting of stylized, overlapping loops and a long horizontal stroke extending to the right.

Thanh X Luu
Primary Examiner
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04/2005